

ABSTRACT

BACKGROUND AND OBJECTIVES

The stress response during cardiac surgery may have deleterious effect during perioperative period. This study evaluates the efficacy of caudal dexmedetomidine on stress response and post operative pain in paediatric cardio thoracic surgery under general anaesthesia .

METHODS

A prospective randomoized controlled study was conducted in 50 ASA PS I patients posted for ASD repair were randomly divided into two groups .Group A received caudal bupivacaine [0.25%] and dexmedetomidine 1mcg/kg with volume of 1.5ml/kg.Group B received caudal bupivacaine [0.25%] and fentanyl 1mcg/kg with volume of 1.5ml/kg. Serum cortisol and serum glucose were measured.Intra operative and post operative hemodynamics were recorded.

RESULTS

Serum cortisol and serum glucose levels were lower in dexmedetomidine group when compared to fentanyl group.

Intra operative and post operative analgesic requirements were decreased in dexmedetomidine group when compared to fentanyl group.

FACES pain score comparatively low in dexmedetomidine group.

CONCLUSION

Dexmedetomidine attenuates the stress response and provides better intra operative and post operative hemodynamics and pronged post operative analgesia and shorter time to extubation.so caudal dexmedetomidine proves to be superior than fentanyl.